

COMPACT multiframe structure examples

In the figures, the 52-multiframe number (MFN) shall have a range of 0 to 3 and can be calculated from the TDMA frame number (FN) as follows:

$$MFN = (FN \text{ div } 52) \bmod 4$$

For COMPACT, timeslot mapping and rotation of the control channels is used such that control channels belonging to a serving time group are rotated over odd timeslot numbers as follows: 7, 5, 3, 1, 7, 5, The rotation occurs between frame numbers (FN) mod 52 = 3 and 4. The timeslot mapping and rotation of the control channels in this manner allows the mobile station to measure the received signal level from surrounding cells in its normal measurement window. Since the rotation repeats itself every 208 frames, the 52-multiframe number (MFN) allows the mobile station to determine its location in the time group rotation during selection and re-selection.

The following relates to Figures D.1 through D.7:

- i) $B(x)^y$ = time group y uses CPBCCCH in block x.
- ii) $C(x)^y$ = time group y uses CPCCCH in block x.
- iii) PTCCH = PTCCH as normal
- iv) $CFCCH^y$ = time group y uses CFCCH.
- v) $CSCH^y$ = time group y uses CSCH.
- vi) IDLE = idle burst.
- vii) X^y = block designated as idle for time group y.
- viii) Empty = used for traffic as normal.

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Frames 0-51 of a 208-multiframe							
MFN = 0							
TG = 0							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	B(0) ⁰	X ¹	X ²	X ³	X ⁴		
1	B(0) ⁰	X ¹	X ²	X ³	X ⁴		
2	B(0) ⁰	X ¹	X ²	X ³	X ⁴		
3	B(0) ⁰	X ¹	X ²	X ³	X ⁴		
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Frames 0-51 of a 208-multiframe							
MFN = 0							
TG = 1							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	B(0) ¹	X ²	X ³	X ⁴		
1	X ⁰	B(0) ¹	X ²	X ³	X ⁴		
2	X ⁰	B(0) ¹	X ²	X ³	X ⁴		
3	X ⁰	B(0) ¹	X ²	X ³	X ⁴		
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Frames 0-51 of a 208-multiframe							
MFN = 0							
TG = 2							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	X ¹	B(0) ²	X ³	X ⁴		
1	X ⁰	X ¹	B(0) ²	X ³	X ⁴		
2	X ⁰	X ¹	B(0) ²	X ³	X ⁴		
3	X ⁰	X ¹	B(0) ²	X ³	X ⁴		
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Frames 0-51 of a 208-multiframe							
MFN = 0							
TG = 3							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	X ¹	X ²	B(0) ³	X ⁴		
1	X ⁰	X ¹	X ²	B(0) ³	X ⁴		
2	X ⁰	X ¹	X ²	B(0) ³	X ⁴		
3	X ⁰	X ¹	X ²	B(0) ³	X ⁴		
4							
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6							
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Figure D.1: COMPACT downlink 52-multiframe structure using 4 time groups for nominal cells (based on an assignment of 1 CPBCH and 3 CPCCCHs with NIB_CPBCH_0 = NIB_CCCH_1 = NIB_CCCH_2 = NIB_CCCH_3 = 4). NIB_CCCH is not broadcast for serving cell time group.

NOTE: For uplink 52-multiframe structure (based on an assignment of 16 prioritized CPRACHs, see subclause 6.3.2.2.3a), replace B() by R() where R() denotes CPRACH, move down one block, and rotate according to subclause 6.3.2.1. Replace C() by R() and move down one block. CPRACH in general can be mapped as PRACH in clause 7 Table 6.

Frames 0-51 of a 208-multiframe							
MFN = 0							
TG = 0							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	B(0) ⁰	X ¹	X ²				
1	B(0) ⁰	X ¹	X ²				
2	B(0) ⁰	X ¹	X ²				
3	B(0) ⁰	X ¹	X ²				
4							
5							
6							
7							
8							
9							
10							
11							
12	PTCCH						
13	X ¹	X ²			C(3) ⁰		
14	X ¹	X ²			C(3) ⁰		
15	X ¹	X ²			C(3) ⁰		
16	X ¹	X ²			C(3) ⁰		
17							
18							
19							
20							
21							
22							
23							
24							
25	IDLE				CFCCH ¹		
26	X ¹	X ²			C(6) ⁰		
27	X ¹	X ²			C(6) ⁰		
28	X ¹	X ²			C(6) ⁰		
29	X ¹	X ²			C(6) ⁰		
30							
31							
32							
33							
34							
35							
36							
37							
38	PTCCH						
39	X ¹	X ²			C(9) ⁰		
40	X ¹	X ²			C(9) ⁰		
41	X ¹	X ²			C(9) ⁰		
42	X ¹	X ²			C(9) ⁰		
43							
44							
45							
46							
47							
48							
49							
50							
51	IDLE				CSCH ⁰		

Frames 0-51 of a 208-multiframe							
MFN = 0							
TG = 1							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰		B(0) ¹	X ²			
1	X ⁰		B(0) ¹	X ²			
2	X ⁰		B(0) ¹	X ²			
3	X ⁰		B(0) ¹	X ²			
4							
5							
6							
7							
8							
9							
10							
11							
12	PTCCH						
13	C(3) ¹	X ²			X ⁰		
14	C(3) ¹	X ²			X ⁰		
15	C(3) ¹	X ²			X ⁰		
16	C(3) ¹	X ²			X ⁰		
17							
18							
19							
20							
21							
22							
23							
24							
25	ID	CFCCH ¹		IDLE			
26	C(6) ¹	X ²			X ⁰		
27	C(6) ¹	X ²			X ⁰		
28	C(6) ¹	X ²			X ⁰		
29	C(6) ¹	X ²			X ⁰		
30							
31							
32							
33							
34							
35							
36							
37							
38	PTCCH						
39	C(9) ¹	X ²			X ⁰		
40	C(9) ¹	X ²			X ⁰		
41	C(9) ¹	X ²			X ⁰		
42	C(9) ¹	X ²			X ⁰		
43							
44							
45							
46							
47							
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49							
50							
51	ID	CSCH ¹		IDLE			

Frames 0-51 of a 208-multiframe							
MFN = 0							
TG = 2							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	X ¹		B(0) ²			
1	X ⁰	X ¹		B(0) ²			
2	X ⁰	X ¹		B(0) ²			
3	X ⁰	X ¹		B(0) ²			
4							
5							
6							
7							
8							
9							
10							
11							
12	PTCCH						
13	X ¹	C(3) ²				X ⁰	
14	X ¹	C(3) ²				X ⁰	
15	X ¹	C(3) ²				X ⁰	
16	X ¹	C(3) ²				X ⁰	
17							
18							
19							
20							
21							
22							
23							
24							
25	IDLE	CFCCH ²		IDLE			
26	X ¹	C(6) ²			X ⁰		
27	X ¹	C(6) ²			X ⁰		
28	X ¹	C(6) ²			X ⁰		
29	X ¹	C(6) ²			X ⁰		
30							
31							
32							
33							
34							
35							
36							
37							
38	PTCCH						
39	X ¹	C(9) ²				X ⁰	
40	X ¹	C(9) ²				X ⁰	
41	X ¹	C(9) ²				X ⁰	
42	X ¹	C(9) ²				X ⁰	
43							
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51	IDLE	CSCH ²		IDLE			

Figure D.2: COMPACT downlink 52-multiframe structure using 3 time groups for nominal cells (based on an assignment of 1 CPBCH and 3 CPCCCHs with NIB_CCCH_0 = NIB_CCCH_1 = NIB_CCCH_2 = 4, NIB_CCCH_3 = 0). NIB_CCCH is not broadcast for serving cell time group.

NOTE: For uplink 52-multiframe structure (based on an assignment of 16 prioritized CPRACHs, see subclause 6.3.2.2.3a), replace B() by R() where R() denotes CPRACH, move down one block, and rotate according to subclause 6.3.2.1. Replace C() by R() and move down one block. CPRACH in general can be mapped as PRACH in Clause 7 Table 6.

Frames 0-51 of a 208-multiframe MFN = 0 TG = 0							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	B(0) ⁰	X ¹	X ²	X ³	X ⁴	X ⁵
1	X ⁰	B(0) ¹	X ¹	X ²	X ³	X ⁴	X ⁵
2	X ⁰	B(0) ²	X ¹	X ²	X ³	X ⁴	X ⁵
3	X ⁰	B(0) ³	X ¹	X ²	X ³	X ⁴	X ⁵
4							
5							
6							
7							
8							
9							
10							
11							
12							
13	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(3) ⁰
14	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(3) ¹
15	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(3) ²
16	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(3) ³
17							
18							
19							
20							
21							
22							
23							
24							
25							
26	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(6) ⁰
27	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(6) ¹
28	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(6) ²
29	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(6) ³
30							
31							
32							
33							
34							
35							
36							
37							
38							
39	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(9) ⁰
40	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(9) ¹
41	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(9) ²
42	X ¹	X ²	X ³	X ⁴	X ⁵	X ⁶	C(9) ³
43							
44							
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51							

Frames 0-51 of a 208-multiframe MFN = 0 TG = 1							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	X ¹	X ²	B(0) ⁰	X ⁴	X ⁵	X ⁶
1	X ⁰	X ¹	X ²	B(0) ¹	X ⁴	X ⁵	X ⁶
2	X ⁰	X ¹	X ²	B(0) ²	X ⁴	X ⁵	X ⁶
3	X ⁰	X ¹	X ²	B(0) ³	X ⁴	X ⁵	X ⁶
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9							
10							
11							
12							
13	X ¹	C(3) ¹	X ²	X ³	X ⁴	X ⁵	X ⁶
14	X ¹	C(3) ²	X ²	X ³	X ⁴	X ⁵	X ⁶
15	X ¹	C(3) ³	X ²	X ³	X ⁴	X ⁵	X ⁶
16	X ¹	C(3) ⁴	X ²	X ³	X ⁴	X ⁵	X ⁶
17							
18							
19							
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21							
22							
23							
24							
25	ID	C(6) ¹					
26	X ¹	C(6) ²	X ²	X ³	X ⁴	X ⁵	X ⁶
27	X ¹	C(6) ³	X ²	X ³	X ⁴	X ⁵	X ⁶
28	X ¹	C(6) ⁴	X ²	X ³	X ⁴	X ⁵	X ⁶
29	X ¹	C(6) ⁵	X ²	X ³	X ⁴	X ⁵	X ⁶
30							
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36							
37							
38							
39	X ¹	C(9) ¹	X ²	X ³	X ⁴	X ⁵	X ⁶
40	X ¹	C(9) ²	X ²	X ³	X ⁴	X ⁵	X ⁶
41	X ¹	C(9) ³	X ²	X ³	X ⁴	X ⁵	X ⁶
42	X ¹	C(9) ⁴	X ²	X ³	X ⁴	X ⁵	X ⁶
43							
44							
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50							
51	ID	CSCH ¹					

Frames 0-51 of a 208-multiframe MFN = 0 TG = 2							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	X ¹	X ²	X ³	X ⁴	B(0) ⁰	X ⁷
1	X ⁰	X ¹	X ²	X ³	X ⁴	B(0) ¹	X ⁷
2	X ⁰	X ¹	X ²	X ³	X ⁴	B(0) ²	X ⁷
3	X ⁰	X ¹	X ²	X ³	X ⁴	B(0) ³	X ⁷
4							
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10							
11							
12							
13	X ¹	X ²	X ³	C(3) ¹	X ⁵	X ⁶	X ⁷
14	X ¹	X ²	X ³	C(3) ²	X ⁵	X ⁶	X ⁷
15	X ¹	X ²	X ³	C(3) ³	X ⁵	X ⁶	X ⁷
16	X ¹	X ²	X ³	C(3) ⁴	X ⁵	X ⁶	X ⁷
17							
18							
19							
20							
21							
22							
23							
24							
25	IDLE	C(6) ¹					
26	X ¹	C(6) ²	X ²	X ³	X ⁴	X ⁵	X ⁶
27	X ¹	C(6) ³	X ²	X ³	X ⁴	X ⁵	X ⁶
28	X ¹	C(6) ⁴	X ²	X ³	X ⁴	X ⁵	X ⁶
29	X ¹	C(6) ⁵	X ²	X ³	X ⁴	X ⁵	X ⁶
30							
31							
32							
33							
34							
35							
36							
37							
38							
39	X ¹	X ²	X ³	C(9) ¹	X ⁵	X ⁶	X ⁷
40	X ¹	X ²	X ³	C(9) ²	X ⁵	X ⁶	X ⁷
41	X ¹	X ²	X ³	C(9) ³	X ⁵	X ⁶	X ⁷
42	X ¹	X ²	X ³	C(9) ⁴	X ⁵	X ⁶	X ⁷
43							
44							
45							
46							
47							
48							
49							
50							
51	IDLE	CSCH ¹					

Frames 0-51 of a 208-multiframe MFN = 0 TG = 3							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	X ¹	X ²	X ³	X ⁴	X ⁵	B(0) ⁰
1	X ⁰	X ¹	X ²	X ³	X ⁴	X ⁵	B(0) ¹
2	X ⁰	X ¹	X ²	X ³	X ⁴	X ⁵	B(0) ²
3	X ⁰	X ¹	X ²	X ³	X ⁴	X ⁵	B(0) ³
4							
5							
6							
7							
8							
9							
10							
11							
12							
13	X ¹	X ²	X ³	X ⁴	X ⁵	C(3) ⁰	X ⁷
14	X ¹	X ²	X ³	X ⁴	X ⁵	C(3) ¹	X ⁷
15	X ¹	X ²	X ³	X ⁴	X ⁵	C(3) ²	X ⁷
16	X ¹	X ²	X ³	X ⁴	X ⁵	C(3) ³	X ⁷
17							
18							
19							
20							
21							
22							
23							
24							
25	IDLE						
26	X ¹	X ²	X ³	X ⁴	X ⁵	C(6) ⁰	X ⁷
27	X ¹	X ²	X ³	X ⁴	X ⁵	C(6) ¹	X ⁷
28	X ¹	X ²	X ³	X ⁴	X ⁵	C(6) ²	X ⁷
29	X ¹	X ²	X ³	X ⁴	X ⁵	C(6) ³	X ⁷
30							

Frames 0-51 of a 208-multiframe MFN = 0 TG = 0							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	B(0) ⁰	X ¹	X ¹	X ²	X ²	X ²
1	X ⁰	B(0) ⁰	X ¹	X ¹	X ²	X ²	X ²
2	X ⁰	B(0) ⁰	X ¹	X ¹	X ²	X ²	X ²
3	X ⁰	B(0) ⁰	X ¹	X ¹	X ²	X ²	X ²
4							
5							
6							
7							
8							
9							
10							
11							
12							
13	X ¹	X ¹	X ²	X ²	X ²	X ²	C(3) ⁰
14	X ¹	X ¹	X ²	X ²	X ²	X ²	C(3) ⁰
15	X ¹	X ¹	X ²	X ²	X ²	X ²	C(3) ⁰
16	X ¹	X ¹	X ²	X ²	X ²	X ²	C(3) ⁰
17							
18							
19							
20							
21							
22							
23							
24							
25							
26	X ¹	X ¹	X ²	X ²	X ²	X ²	C(6) ⁰
27	X ¹	X ¹	X ²	X ²	X ²	X ²	C(6) ⁰
28	X ¹	X ¹	X ²	X ²	X ²	X ²	C(6) ⁰
29	X ¹	X ¹	X ²	X ²	X ²	X ²	C(6) ⁰
30							
31							
32							
33							
34							
35							
36							
37							
38							
39	X ¹	X ¹	X ²	X ²	X ²	X ²	C(9) ⁰
40	X ¹	X ¹	X ²	X ²	X ²	X ²	C(9) ⁰
41	X ¹	X ¹	X ²	X ²	X ²	X ²	C(9) ⁰
42	X ¹	X ¹	X ²	X ²	X ²	X ²	C(9) ⁰
43							
44							
45							
46							
47							
48							
49							
50							
51							

Frames 0-51 of a 208-multiframe MFN = 0 TG = 1							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	X ⁰	X ¹	B(0) ⁰	X ²	X ²	X ²
1	X ⁰	X ⁰	X ¹	B(0) ⁰	X ²	X ²	X ²
2	X ⁰	X ⁰	X ¹	B(0) ⁰	X ²	X ²	X ²
3	X ⁰	X ⁰	X ¹	B(0) ⁰	X ²	X ²	X ²
4							
5							
6							
7							
8							
9							
10							
11							
12							
13	X ¹	C(3) ¹	X ²	X ²	X ²	X ²	X ²
14	X ¹	C(3) ¹	X ²	X ²	X ²	X ²	X ²
15	X ¹	C(3) ¹	X ²	X ²	X ²	X ²	X ²
16	X ¹	C(3) ¹	X ²	X ²	X ²	X ²	X ²
17							
18							
19							
20							
21							
22							
23							
24							
25	ID	C(6) ¹	X ²	X ²	X ²	X ²	X ²
26	X ¹	C(6) ¹	X ²	X ²	X ²	X ²	X ²
27	X ¹	C(6) ¹	X ²	X ²	X ²	X ²	X ²
28	X ¹	C(6) ¹	X ²	X ²	X ²	X ²	X ²
29	X ¹	C(6) ¹	X ²	X ²	X ²	X ²	X ²
30							
31							
32							
33							
34							
35							
36							
37							
38							
39	X ¹	C(9) ¹	X ²	X ²	X ²	X ²	X ²
40	X ¹	C(9) ¹	X ²	X ²	X ²	X ²	X ²
41	X ¹	C(9) ¹	X ²	X ²	X ²	X ²	X ²
42	X ¹	C(9) ¹	X ²	X ²	X ²	X ²	X ²
43							
44							
45							
46							
47							
48							
49							
50							
51	ID	CSCH ¹					

Frames 0-51 of a 208-multiframe MFN = 0 TG = 2							
TS	0	1	2	3	4	5	6
FN	0	1	2	3	4	5	6
0	X ⁰	X ⁰	X ¹	X ¹	X ²	B(0) ⁰	X ²
1	X ⁰	X ⁰	X ¹	X ¹	X ²	B(0) ⁰	X ²
2	X ⁰	X ⁰	X ¹	X ¹	X ²	B(0) ⁰	X ²
3	X ⁰	X ⁰	X ¹	X ¹	X ²	B(0) ⁰	X ²
4							
5							
6							
7							
8							
9							
10							
11							
12							
13	X ¹	X ¹	X ²	C(3) ²	X ²	X ²	X ²
14	X ¹	X ¹	X ²	C(3) ²	X ²	X ²	X ²
15	X ¹	X ¹	X ²	C(3) ²	X ²	X ²	X ²
16	X ¹	X ¹	X ²	C(3) ²	X ²	X ²	X ²
17							
18							
19							
20							
21							
22							
23							
24							
25	IDLE						
26	X ¹	X ¹	X ²	C(6) ²	X ²	X ²	X ²
27	X ¹	X ¹	X ²	C(6) ²	X ²	X ²	X ²
28	X ¹	X ¹	X ²	C(6) ²	X ²	X ²	X ²
29	X ¹	X ¹	X ²	C(6) ²	X ²	X ²	X ²
30							
31							
32							
33							
34							
35							
36							
37							
38							
39	X ¹	X ¹	X ²	C(9) ²	X ²	X ²	X ²
40	X ¹	X ¹	X ²	C(9) ²	X ²	X ²	X ²
41	X ¹	X ¹	X ²	C(9) ²	X ²	X ²	X ²
42	X ¹	X ¹	X ²	C(9) ²	X ²	X ²	X ²
43							
44							
45							
46							
47							
48							
49							
50							
51	IDLE						

Figure D.4: COMPACT downlink 52-multiframe structure using 3 time groups for large cells (based on an assignment of 1 CPBCH and 3 CPCCCHs with NIB_CCCH_0 = NIB_CCCH_1 = NIB_CCCH_2 = 4, NIB_CPBCH_3 = 0). NIB_CCCH is not broadcast for serving cell time group.

NOTE: For uplink 52-multiframe structure (based on an assignment of 16 prioritized CPRACHs, see subclause 6.3.2.2.3a), replace B() by R() where R() denotes CPRACH, move down one block, and rotate according to subclause 6.3.2.1. Replace C() by R() and move down one block. CPRACH in general can be mapped as PRACH in Clause 7 Table 6.

Frames 0-51 of a 208-multiframe MFN = 0								Frames 52-103 of a 208-multiframe MFN = 1								Frames 104-155 of a 208-multiframe MFN = 2								Frames 156-207 of a 208-multiframe MFN = 3											
TS	0	1	2	3	4	5	6	7	TS	0	1	2	3	4	5	6	7	TS	0	1	2	3	4	5	6	7	TS	0	1	2	3	4	5	6	7
FN									FN									FN									FN								
0		B(0) ^u		X ¹		X ²		X ³	52		X ¹		X ²		X ³		B(0) ^u	104		X ¹		X ²		B(0) ^u		X ¹	156		X ¹		B(0) ^u		X ¹		
1		B(0) ^u		X ¹		X ²		X ³	53		X ¹		X ²		X ³		B(0) ^u	105		X ¹		X ²		B(0) ^u		X ¹	157		X ¹		B(0) ^u		X ¹		
2		B(0) ^u		X ¹		X ²		X ³	54		X ¹		X ²		X ³		B(0) ^u	106		X ¹		X ²		B(0) ^u		X ¹	158		X ¹		B(0) ^u		X ¹		
3		B(0) ^u		X ¹		X ²		X ³	55		X ¹		X ²		X ³		B(0) ^u	107		X ¹		X ²		B(0) ^u		X ¹	159		X ¹		B(0) ^u		X ¹		
4									56									108									160								
5									57									109									161								
6									58									110									162								
7									59									111									163								
8									60									112									164								
9									61									113									165								
10									62									114									166								
11									63									115									167								
12									64									116									168								
13									65		X ²		X ³		C(3) ^u		X ¹	117		X ¹		C(3) ^u		X ¹		X ²	169		C(3) ^u		X ¹		X ²		
14									66		X ²		X ³		C(3) ^u		X ¹	118		X ¹		C(3) ^u		X ¹		X ²	170		C(3) ^u		X ¹		X ²		
15									67		X ²		X ³		C(3) ^u		X ¹	119		X ¹		C(3) ^u		X ¹		X ²	171		C(3) ^u		X ¹		X ²		
16									68		X ²		X ³		C(3) ^u		X ¹	120		X ¹		C(3) ^u		X ¹		X ²	172		C(3) ^u		X ¹		X ²		
17									69									121									173								
18									70									122									174								
19									71									123									175								
20									72									124									176								
21									73									125									177								
22									74									126									178								
23									75									127									179								
24									76									128									180								
25									77									129									181								
26									78		X ²		X ³		C(6) ^u		X ¹	130		X ¹		C(6) ^u		X ¹		X ²	182		C(6) ^u		X ¹		X ²		
27									79		X ²		X ³		C(6) ^u		X ¹	131		X ¹		C(6) ^u		X ¹		X ²	183		C(6) ^u		X ¹		X ²		
28									80		X ²		X ³		C(6) ^u		X ¹	132		X ¹		C(6) ^u		X ¹		X ²	184		C(6) ^u		X ¹		X ²		
29									81		X ²		X ³		C(6) ^u		X ¹	133		X ¹		C(6) ^u		X ¹		X ²	185		C(6) ^u		X ¹		X ²		
30									82									134									186								
31									83									135									187								
32									84									136									188								
33									85									137									189								
34									86									138									190								
35									87									139									191								
36									88									140									192								
37									89									141									193								
38									90									142									194								
39									91		X ²		X ³		C(9) ^u		X ¹	143		X ¹		C(9) ^u		X ¹		X ²	195		C(9) ^u		X ¹		X ²		
40									92		X ²		X ³		C(9) ^u		X ¹	144		X ¹		C(9) ^u		X ¹		X ²	196		C(9) ^u		X ¹		X ²		
41									93		X ²		X ³		C(9) ^u		X ¹	145		X ¹		C(9) ^u		X ¹		X ²	197		C(9) ^u		X ¹		X ²		
42									94		X ²		X ³		C(9) ^u		X ¹	146		X ¹		C(9) ^u		X ¹		X ²	198		C(9) ^u		X ¹		X ²		
43									95									147									199								
44									96									148									200								
45									97									149									201								
46									98									150									202								
47									99									151									203								
48									100									152									204								
49									101									153									205								
50									102									154									206								
51									103									155									207								

Figure D.5: Example of COMPACT downlink timeslot mapping and rotation of control channels using 4 time groups for nominal cells (based on an assignment of 1 CPBCH and 3 CPCCCHs with NIB_CCCH_0 = NIB_CCCH_1 = NIB_CCCH_2 = NIB_CCCH_3 = 4). TG = 0 is illustrated. NIB_CCCH is not broadcast for serving cell time group.

NOTE: For uplink 52-multiframe structure (based on an assignment of 16 prioritized CPRACHs, see subclause 6.3.2.2.3a), replace B() by R() where R() denotes CPRACH, move down one block, and rotate according to subclause 6.3.2.1. Replace C() by R() and move down one block. CPRACH in general can be mapped as PRACH in Clause 7 Table 6.

Frames 0-51 of a 208-multiframe MFN = 0								Frames 52-103 of a 208-multiframe MFN = 1								Frames 104-155 of a 208-multiframe MFN = 2								Frames 156-207 of a 208-multiframe MFN = 3											
TS	0	1	2	3	4	5	6	7	TS	0	1	2	3	4	5	6	7	TS	0	1	2	3	4	5	6	7	TS	0	1	2	3	4	5	6	7
FN									FN									FN									FN								
0		B(0) ^u		X ¹		X ²			52		X ¹		X ²				B(0) ^u	104		X ¹						156				B(0) ^u		X ¹		X ²	
1		B(0) ^u		X ¹		X ²			53		X ¹		X ²				B(0) ^u	105		X ²						B(0) ^u		X ¹		X ²		X ¹		X ²	
2		B(0) ^u		X ¹		X ²			54		X ¹		X ²				B(0) ^u	106		X ¹						B(0) ^u		X ¹		X ²		X ¹		X ²	
3		B(0) ^u		X ¹		X ²			55		X ¹		X ²				B(0) ^u	107		X ¹						B(0) ^u		X ¹		X ²		X ¹		X ²	
4									56									108																	
5									57									109																	
6									58									110																	
7									59									111																	
8									60									112																	
9									61									113																	
10									62									114																	
11									63									115																	
12									64									116																	
13			X ¹		X ²				65		X ²				C(3) ^u		X ¹	117				C(3) ^u			X ¹		X ²								
14			X ¹		X ²				66		X ²				C(3) ^u		X ¹	118				C(3) ^u			X ¹		X ²								
15			X ¹		X ²				67		X ²				C(3) ^u		X ¹	119				C(3) ^u			X ¹		X ²								
16			X ¹		X ²				68		X ²				C(3) ^u		X ¹	120				C(3) ^u			X ¹		X ²								
17									69									121																	
18									70									122																	
19									71									123																	
20									72									124																	
21									73									125																	
22									74									126																	
23									75									127																	
24									76									128																	
25									77									129																	
26			X ¹		X ²				78		X ²				C(6) ^u		X ¹	130					C(6) ^u			X ¹		X ²							
27			X ¹		X ²				79		X ²				C(6) ^u		X ¹	131					C(6) ^u			X ¹		X ²							
28			X ¹		X ²				80		X ²				C(6) ^u		X ¹	132					C(6) ^u			X ¹		X ²							
29			X ¹		X ²				81		X ²				C(6) ^u		X ¹	133					C(6) ^u			X ¹		X ²							
30									82									134																	
31									83									135																	
32									84									136																	
33									85									137																	
34									86									138																	
35									87									139																	
36									88									140																	
37									89									141																	
38									90									142																	
39			X ¹		X ²				91		X ²				C(9) ^u		X ¹	143						C(9) ^u			X ¹		X ²						
40			X ¹		X ²				92		X ²				C(9) ^u		X ¹	144						C(9) ^u			X ¹		X ²						
41			X ¹		X ²				93		X ²				C(9) ^u		X ¹	145						C(9) ^u			X ¹		X ²						
42			X ¹		X ²				94		X ²				C(9) ^u		X ¹	146						C(9) ^u			X ¹		X ²						
43									95									147																	
44									96									148																	
45									97									149																	
46									98									150																	
47									99									151																	
48									100									152																	
49									101									153																	
50									102									154																	
51									103									155																	
																			</																

Figure D.6: Example of COMPACT downlink timeslot mapping and rotation of control channels using 3 time groups for nominal cells (based on an assignment of 1 CPBCH and 3 CPCCCHs with NIB_CCCH_0 = NIB_CCCH_1 = NIB_CCCH_2 = 4, NIB_CCCH_3 = 0). TG = 0 is illustrated. NIB_CCCH is not broadcast for serving cell time group.

NOTE: For uplink 52-multiframe structure (based on an assignment of 16 prioritized CPRACHs, see subclause 6.3.2.2.3a), replace B() by R() where R() denotes CPRACH, move down one block, and rotate according to subclause 6.3.2.1. Replace C() by R() and move down one block. CPRACH in general can be mapped as PRACH in Clause 7 Table 6.

Frames 0-51 of a 208-multiframe MFN = 0								Frames 52-103 of a 208-multiframe MFN = 1								Frames 104-155 of a 208-multiframe MFN = 2								Frames 156-207 of a 208-multiframe MFN = 3											
TS	0	1	2	3	4	5	6	7	TS	0	1	2	3	4	5	6	7	TS	0	1	2	3	4	5	6	7	TS	0	1	2	3	4	5	6	7
FN									FN									FN									FN								
0	B(0) ^u	X ¹	X ²	X ³	X ⁴				52	X ¹	X ²	X ³	X ⁴				B(0) ^u	104	X ²	X ³		B(0) ^u	X ¹			156	X ³		B(0) ^u	X ¹	X ²				
1	B(0) ^u	X ¹	X ²	X ³	X ⁴				53	X ¹	X ²	X ³	X ⁴				B(0) ^u	105	X ²	X ³		B(0) ^u	X ¹			157	X ³		B(0) ^u	X ¹	X ²				
2	B(0) ^u	X ¹	X ²	X ³	X ⁴				54	X ¹	X ²	X ³	X ⁴				B(0) ^u	106	X ²	X ³		B(0) ^u	X ¹			158	X ³		B(0) ^u	X ¹	X ²				
3	B(0) ^u	X ¹	X ²	X ³	X ⁴				55	X ¹	X ²	X ³	X ⁴				B(0) ^u	107	X ²	X ³		B(0) ^u	X ¹			159	X ³		B(0) ^u	X ¹	X ²				
4	X ¹								56								X ¹	108								160									
5	X ¹								57								X ¹	109								161									
6	X ¹								58								X ¹	110								162									
7	X ¹								59								X ¹	111								163									
8									60									112									164								
9									61									113									165								
10									62									114									166								
11									63									115									167								
12	PTCCH								64	PTCCH								116	PTCCH								168	PTCCH							
13	X ¹	X ²	X ³	X ⁴	C(3) ^u			65	X ²	X ³	C(3) ^u	X ¹					117	X ²	C(3) ^u	X ¹	X ²				169	C(3) ^u	X ¹	X ²	X ³						
14	X ¹	X ²	X ³	X ⁴	C(3) ^u			66	X ²	X ³	C(3) ^u	X ¹					118	X ²	C(3) ^u	X ¹	X ²				170	C(3) ^u	X ¹	X ²	X ³						
15	X ¹	X ²	X ³	X ⁴	C(3) ^u			67	X ²	X ³	C(3) ^u	X ¹					119	X ²	C(3) ^u	X ¹	X ²				171	C(3) ^u	X ¹	X ²	X ³						
16	X ¹	X ²	X ³	X ⁴	C(3) ^u			68	X ²	X ³	C(3) ^u	X ¹					120	X ²	C(3) ^u	X ¹	X ²				172	C(3) ^u	X ¹	X ²	X ³						
17								69									121									173									
18								70									122									174									
19								71									123									175									
20								72									124									176									
21								73									125									177									
22								74									126									178									
23								75									127									179									
24								76									128									180									
25	IDLE							CFCCH ¹		77	IDLE							CFCCH ¹	IDLE		129	IDLE	CFCCH ¹	IDLE		181	ID	CFCCH ¹	IDLE						
26	X ¹	X ²	X ³	C(6) ^u				78	X ²	X ³	C(6) ^u	X ¹					130	X ²	C(6) ^u	X ¹	X ²				182	C(6) ^u	X ¹	X ²	X ³						
27	X ¹	X ²	X ³	C(6) ^u				79	X ²	X ³	C(6) ^u	X ¹					131	X ²	C(6) ^u	X ¹	X ²				183	C(6) ^u	X ¹	X ²	X ³						
28	X ¹	X ²	X ³	C(6) ^u				80	X ²	X ³	C(6) ^u	X ¹					132	X ²	C(6) ^u	X ¹	X ²				184	C(6) ^u	X ¹	X ²	X ³						
29	X ¹	X ²	X ³	C(6) ^u				81	X ²	X ³	C(6) ^u	X ¹					133	X ²	C(6) ^u	X ¹	X ²				185	C(6) ^u	X ¹	X ²	X ³						
30								82									134									186									
31								83									135									187									
32								84									136									188									
33								85									137									189									
34								86									138									190									
35								87									139									191									
36								88									140									192									
37								89									141									193									
38	PTCCH								90	PTCCH								142	PTCCH								194	PTCCH							
39	X ¹	X ²	X ³	C(9) ^u				91	X ²	X ³	C(9) ^u	X ¹					143	X ²	C(9) ^u	X ¹	X ²				195	C(9) ^u	X ¹	X ²	X ³						
40	X ¹	X ²	X ³	C(9) ^u				92	X ²	X ³	C(9) ^u	X ¹					144	X ²	C(9) ^u	X ¹	X ²				196	C(9) ^u	X ¹	X ²	X ³						
41	X ¹	X ²	X ³	C(9) ^u				93	X ²	X ³	C(9) ^u	X ¹					145	X ²	C(9) ^u	X ¹	X ²				197	C(9) ^u	X ¹	X ²	X ³						
42	X ¹	X ²	X ³	C(9) ^u				94	X ²	X ³	C(9) ^u	X ¹					146	X ²	C(9) ^u	X ¹	X ²				198	C(9) ^u	X ¹	X ²	X ³						
43								95									147									199									
44								96									148									200									
45								97									149									201									
46								98									150									202									
47								99									151									203									
48								100									152									204									
49								101									153									205									
50								102									154									206									
51	IDLE							CSCH ¹		103	IDLE							CSCH ¹	IDLE		155	IDLE	CSCH ¹	IDLE		207	ID	CSCH ¹	IDLE						

Figure D.7: Example of COMPACT downlink timeslot mapping and rotation of control channels using 4 time groups for nominal cells (based on an assignment of 1 CPBCH and 3 CPCCCHs with NIB_CCCH_0 = NIB_CCCH_2 = NIB_CCCH_3 = 4, NIB_CCCH_1 = 5). TG = 0 is illustrated. NIB_CCCH is not broadcast for serving cell time group.

NOTE: For uplink 52-multiframe structure (based on an assignment of 16 prioritized CPRACHs, see subclause 6.3.2.2.3a), replace B() by R() where R() denotes CPRACH, move down one block, and rotate according to subclause 6.3.2.1. Replace C() by R() and move down one block. CPRACH in general can be mapped as PRACH in Clause 7 Table 6.

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